THE INDIANA

FARMER & GARDENER.

Vol. I. **INDIANAPOLIS, FEBRUARY 8, 1845.** **No. 2.**

PUBLISHED BY

S. V. B. NOEL & CO.

TERMS.—The FARMER AND GARDENER is published *semi-monthly*, each number containing 16 royal octavo pages, at *One Dollar* per annum per copy; *Seventy-five Cents* per copy for Four and less than Ten copies; and *Fifty Cents* per copy for Ten or more copies to the same Post Office. All subscriptions IN ADVANCE.

Effects of Cultivation.

The following are extracts from a speech by Col. Knapp, in delivering the premiums awarded at the American Institute, at a late annual Fair:

"Every thing in this country (said he) has been brought forward by protection. In this bleak clime, but few of the sustaining fruits of the earth were here indigenous, or in a perfect state. Even the Indian corn, so often considered a native here, was with difficulty acclimated. It was brought from the south, and by degrees was coaxed to ripen in a northern latitude. The aborigines who cultivated it, taught the pilgrims how to raise it; they plucked the earliest ears with the husk and braided several of them together, for the next year's crop.

The pumpkin, brought from Spain, was first planted in Rowley, Mass., and it was several years before it came to a hard knotty shell, which marks the true Yankee pumpkin, such as are selected for the golden pies of their glorious thanksgiving festival.

Our wheat was with difficulty acclimated. That brought from the mother country had grown from spring to fall, but the season was not long enough here to insure a crop; it was then sown in the fall, grew under snows in winter, and catching the warmest breath of spring, yielded its increase by mid-summer.

Asparagus, which is now the delight of all, as an early vegetable, and for which many millions of dollars are paid our gardeners yearly, is of late culture in this country. At the time of the revolution, asparagus was only cultivated on the seaboard—this luxury had not then reached the farmer of the interior.

The history of the potatoe is a singular one. Rees' Encyclopedia states that the potatoe was brought from Virginia, by Sir Walter Raleigh, to Ireland. The writer should have said from South America, in the latter part of the sixteenth century. Sir Walter had no idea of its ever being used as an esculent at that time. It was pointed out to him as a beautiful flower, and its hard bulby root was said, by the natives, to possess medicinal qualities. He took it to Ireland, where he had estates presented to him by Queen Elizabeth, and planted it in his garden. The flower did not improve by cultivation, but the root grew larger and softer.

The potatoe in its native bed, was a coarse ground-nut. The thought struck the philosopher to try the potatoe as an edible, and boiling and roasting it, he found it, by either process, excellent. He then gave some of the plants to the peasantry, and they soon became, in a measure, a substitute for bread when the harvest was scanty.

The potatoe was successfully cultivated in Ireland before it was thought so much of in England. It grew into favor by slow degrees, and it was so little known when our pilgrim fathers came to this country, that it was not thought of for a crop in the new world. It was not until 1710 that the Irish potatoe reached this country. A colony of Presbyterian Irish, who settled in London-

derry, in New Hampshire, brought the root with them. This people found their favorite vegetable flourished well in new grounds. By degrees their neighbors came into the habit of raising potatoes; but many years elapsed before the cultivation of them was generally known among the yeomanry of this country. Long after they were cultivated in New England, they were held in contempt, and the master mechanic often had to stipulate with his apprentice that he should not be obliged to eat potatoes. An aged mechanic once informed me that he had raised nine bushels, having at that time (1746) a dozen apprentices: but did not venture to offer them a boiled potatoe with the meat, but left them in the cellar for the apprentices to get and roast as they pleased; h soon found that he should not have enough for seed, and locked up what was left. The next year he raised the enormous quantity of thirty-six bushels; the neighbors stared —but his boys devoured them during the following winter.

About this time, some of the gentry brought this vegetable on their tables, and the prejudice against them vanished. Thus by degrees a taste for this food was formed, never to be extinguished. The cultivation of the potatoe is now well understood—a crop ameliorates, instead of impoverishing the soil, and the culture can be increased to any extent. Thus by the curiosity of one lover of nature, and his experiments, has an humble weed been brought from the mountains of South America, and spread over Europe and North America, until it is emphatically called the "bread of nations." Still the country from which it was taken has been too ignorant or superstitious to attempt its cultivation, till within a few years. Now the lights of science are chasing away the long deep shadows of the Andes.

Rice was brought from India in 1792, and was cultivated by way of experiment in South Carolina. It succeeded well, and was for many years the staple article of that State.

The cotton plant was at first cultivated as a flower in our gardens, and a beautiful flower it is. This plant alone has made a revolution in the finances of the world. Look at the growth and consumption of it in the United States, and the immense manufacture of it in England, where it cannot be grown, and you will find my assertion true in its most extended sense."

A woman that loves to be at the window, is like a bunch of grapes in the highway.

The best furniture in the house is a virtuous woman.

The Farmer of Mount Vernon.

Washington was passionately fond of agriculture. Its improvement was ever with him an object of paramount regard. Virginia can boast of few sons to whom her agriculture has been more indebted; few who assisted in promoting her interest to a greater extent, or with the manifestation of a more ardent and patronizing zeal. The following account of his farming operations will serve to exhibit the father of his country (the man first in war, first in peace, and first in the hearts of his countrymen) in his true light.

"The farm of Gen. Washington, at Mount Vernon, contained ten thousand acres of land in one body, equal to 16 square miles. It was divided into farms of convenient size, at the distance of one, two, three, four and five miles from his mansion house. These farms he visited every day in pleasant weather, and was constantly engaged in making experiments for the improvement of agriculture. Some idea of the extent of his farming operations may be formed from the following facts. In 1787, he had five hundred acres in grass, sowed six hundred bushels of oats, seven hundred acres with wheat, and prepared as much more for corn, barley, potatoes, beans, peas, &c., and one hundred and fifty acres in turneps. His stock consisted of one hundred and forty horses, one hundred and twelve cows, three hundred and thirty-five working oxen, heifers and steers, and five hundred sheep. He constantly employed two hundred and fifty hands, and kept twenty-four plows going during the whole year, when the earth and weather would permit. In 1786, he slaughtered one hundred and fifty hogs, weighing eighteen thousand five hundred and ninety pounds, for the use of his family, besides provisions for the use of his negroes."

All eyes are now directed to Texas, and the 'Aroostook,' which a little while ago was the point of attraction to the whole country, has settled down quietly, and its inhabitants are prospering as industrious men always do and should.

Aroostook Co. y.—The Bangor (Maine) Whig speaks of e rapidity with which this county, formed out of the long disputed territory, has been settled. The land is equal to the best in the State, and many farmers have fields of wheat of seventy-five and a hundred acres, yielding an average of thirty bushels to the acre. There are now in the county six hundred families, making a population of 3,600.

The devil goes shares in gaming.

Statistics.

We give in this number a series of valuable tables, which our readers will often, probably, wish to consult. We have taken them from an old file of the N. E. Farmer:

Nutritive Matter of Different Vegetable Substances.— Davy, in his elements of Agricultural Chemistry, gives the following table, showing the quantity of soluble or nutritive matters contained in 1,000 parts of different vegetable substances, examined in their green state:

	Nutritive matter.
Middlesex wheat,	955
North American wheat,	955
Norfolk barley,	920
Oats, from Scotland,	743
Rye, from Yorkshire,	792
Common beans,	570
Dry peas,	574
Potatoes,	200 to 260
Red beet,	148
White beet,	136
Parsneps,	99
Carrots,	98
Cabbage,	73
Swedish turnep,	64
Common turnep,	42
Broad-leaved clover,	39
White clover,	32
Sainfoin,	39
Lucerne,	23
Timothy,	33
Fertile meadow-grass,	78

Proper Depth for Seeds.—Various experiments have been tried to determine the proper depth at which seeds should be put. The following is the result of an experiment with maize or Indian corn:

That which was planted at the depth of

No. 1.	1	inch, came up in	8 1-2 days.
2.	1 1-2	' '	9 1-2
3.	2	' '	10
4.	2 1-2	' '	11 1-2
5.	3	' '	12
6.	3 1-2	' '	13
7.	4	' '	13 1-2
8.	4 1-2	' '	—
9.	5	' '	—
10.	5 1-2	' '	17 1-2
11.	6	' '	—

The Nos. 8, 9, 11, were dug up after 22 days, and it was found that No. 8 had an inch more to grow to reach the surface of the earth. Nos. 9 and 11 had just sprouted, but were short, and three inches below the surface. No. 10 came up in 17 1-2 days, but the tender leaf remained only six days green, and then withered. There is no experiment which shows more clearly the advantage of a shallow planting in a soil not too loose, and trodden down, than this. The more shallow the seed was covered with earth, the more rapidly the sprout made its appearance, and the stronger afterwards was the stalk. The deeper the seed lay, the longer it remained before it came to the surface. Four inches was too deep for the maize, and must therefore be for yet smaller grain kernels.

Petri gives an experiment made on rye, with the following results. The first column shows the depth at which the seed was put; the second, the number of days that elapsed before it appeared above ground; the third, the number of plants that came up:

Depth.	*Appeared.*	*No. plants.*
1-2 inch.	11 days.	7-8
1 '	12 '	all
2 inches	18 '	7-8
3 '	20 '	6-8
4 '	21 '	4-8
5 '	22 '	3-8
6 '	23 '	1-8

The root-stalk forms itself always next below the surface of the ground, and if we place the grain deep, it must first put out its sprouts to the surface, and form its side branches in a nearer connexion with the air. We never find that the sucker-roots are ranged from below to aboye, but the contrary.

From the experiments of Ugazy, who tried seventy-six with different grains, it is clear that shallow-sowing, if the seed is only so far covered as to sprout, and the germ is protected from immediate contact with the air, is preferable to laying the seed deep, because it springs up quicker, and acquires a stronger growth, and has hardier plants."

Liability of different Animals to Die.— Veit, a celebrated German writer upon Agriculture, gives the following as the rate of insurance in his country, of different animals, which may show how the hazards of exposure to death are viewed by those who have been at pains to ascertain these things:

Oxen,	at 1.3 per ct.
Cows,	1.2
Three year old kine.	1.
Two year old do	1.1
One year old do	2.
Horses,	4.9
Sheep,	7.7
Swine,	2.9

Losses by fatal accidents are given thus:

Loss according to per centage of value:	Horses,	cattle,	sheep,	swine
From their birth to their weaning,	5	3	10	12
" weaning to 1 year old,	4	2	8	6
" 1—2 years,	3	2	7	3
" 2—3 years,	3	1.5	5	3
During the time of being used,	5	2	5	4

Equivalent of Various Plants, &c., to Hay.—We find the following table of equivalents in Smith's translation of Burger's Economy of Farming:

100 lbs. of good hay are equal to—

90	lbs. of clover hay, made when fully blossomed.
88	" of do. before it blossoms.
98	" clover, 2d. crop.
98	" lucerne hay.
89	" sainfoin do.
410	" green clover.
467	" vetches or tares, green.
275	" green Indian corn.
374	" wheat straw.
442	" rye straw.
164	" oat straw.
153	" pea stalk.
201	" raw potatoes.
175	" boiled do.
339	" mangold wurtzol.
504	" English turneps.
276	" carrots.
308	" ruta baga.
54	" rye. (grain of)
46	" wheat do.
59	" oats do.
64	" buckwheat do.
57	" Indian corn do.
45	" peas.
45	" beans.
50	" horse chestnuts.
68	" acorns.
62	" sunflower seed.
69	" linseed cake.
105	" wheat bran.
109	" rye bran.
167	" wheat and oat chaff.
179	" rye and barley chaff.

An ox requires 2 per cent. of his live weight, in hay, per day; if he works, 2 1-2 per cent. A milch cow, 3 per cent. A fattening ox, 5 per cent. at first; 4 per cent. when half fat and afterwards. Sheep, when grown, 3 1-2 per cent. of their weight in hay per day.

Constituents of Certain Plants.—The following table, by Dr. Lyon Playfair, is valuable, as showing the relative worth of various plants, and for purpose of comparison. The results of his analysis agree very closely with those of Sprengel:

100 *lbs. contain of*	*Water.*	*Organic mat.*
Peas,	16	80 1-2
Beans,	14	82 1-2
Oats,	18	79
Barley meal,	15 1-2	82 1-2
Hay,	16	76 1-2
White turneps,	89	10
Ruta Baga,	85	14
Mangold Wurtzol,	89	10
White Carrot,	87	12
Potatoes,	72	27
Red Beet,	89	10

The Lake Trade.—We have frequently had our attention drawn to the extraordinary and increasing inland trade of our Lakes. The report from the Bureau of the Corps of Topographical Engineers states this trade as now rather exceeding one hundred millions of dollars.

The Cleveland Herald of the 13th instant gives the details of the trade of that port.—From an examination of these we find that for 1844 the tonnage belonging to that port amounted to 11,733 tons; arrivals that year (exclusive of steamboats) 1,661; departures (exclusive of steamboats) 1,567,

Imports coastwise for the same year,	$5,670,622
Imports from Canada,	12,043
Exports coastwise,	4,933,326
Exports to Canada,	579,711
Making a total of exports and Imports of	$11,195,702

During the same year there were 2,400 arrivals and departures of steamboats, and the number of men employed as mariners in the trade of this port amounted to 681.

Missouri.—The census of all the counties in Missouri, except three, shows a population of 489,958. The three counties not heard from are Clark, Cole, and Scott. They have been heard from unofficially, and their population added makes the entire population of the State 511,937. This entitles the State to seven members in Congress, instead of five. The increase in the last four years has been more than 420,000. The population of the principal towns is thus stated: St. Louis city, 34,140: Hannibal, 1,789; Boonville, 1,670; St. Charles, 1,042; Palmyra, 1,039.

Statistics of large Libraries.—The number of volumes claimed to be possessed by the twelve greatest Libraries of Europe, is as follows: The Bibliothéque du Roi, in Paris, 650,000; Munich, 500,000, of which one-fifth, at least, are duplicates; Copenhagen, 400,000; St. Petersburgh, 400,000; Berlin, 330,000; Vienna, 300,000; the British Museum, 270,000; Dresden, 350,000; the Bibliothéque de l'Arsenal, in Paris, 200,000; the Bibliothéque de St. Genevieve, in Paris, 200,000; the Brera Library, in Milan, 200,000; Gottingen, 200,000.

The best throw upon the dice is to throw them away.

He who thinks to cheat another, cheats himself most.

He who is an ass, and takes himself to be a stag, when he comes to leap the ditch finds his mistake.

Chemical Terms.

Every person who reads a newspaper meets such terms as nitrate of potash, sulphu*ret*, nit*ric* acid, sulphur*ous* acid, oxide, &c. &c. Unless one understands the nomenclature of chemistry, these terms will convey no meaning. For the benefit of our readers, we extract from Dr. Turner's Chemistry, a very simple, lucid statement of the nomenclature of Chemistry.

"Chemistry is indebted for its nomenclature to the labors of four celebrated chemists, Lavoisier, Berthollet, Guyton-Morveau, and Fourcroy. The principles which guided them in its construction are exceedingly simple and ingenious. The known elementary substances, and the more familiar compound ones were allowed to retain the appellation which general usage had assigned to them. The newly discovered elements were named from some striking property. Thus, as it was supposed that acidity was always owing to the presence of the vital air discovered by Priestley and Sheele, they gave it the name of *oxygen*, derived from two Greek words signifying generator of acid; and they called inflammable air, *hydrogen*, from the circumstance of its entering into the composition of water.

"Compounds with which oxygen forms a part were called *acids* or *oxides*, according as they do or do not possess acidity. An oxide of iron or copper signifies a combination of those metals with oxygen, which has no acid properties. The name of an acid was derived from the substance acidified by the oxygen, to which was added the termination in *ic*. Thus, sulphur*ic* and carbon*ic* acids signify acid compounds of sulphur and carbon with oxygen gas. If sulphur or any other body should form two acids, that which contains the least quantity of oxygen is made to terminate in *ous*, as sulphur*ous* acid. The termination in *uret* was intended to denote combinations of the simple non-metallic substances, either with one another, with a metal, or with a metallic oxide.—Sulph*uret* and carb*uret* of iron, for example, signify compounds of sulphur and carbon with iron. The different oxides or sulphurets of the same substance were distinguished from one another by some epithet, which was commonly derived from the color of the compound, such as the black and red oxides of iron, the black and red sulphurets of mercury. Though this practice is still continued occasionally, it is now more customary to distinguish degrees of oxidation by the use of derivatives from the Greek. *Pro*toxide signifies the first degree of oxidation, *deu*toxide the second, *trito*xide the third, and *per*oxide the highest. The sulphurets, carburets, &c., of the same substance are designated in a similar way. The combination of acids with alkalies, earths, or metallic oxides, were termed *salts*, the names of which were so contrived as to indicate the substances contained in them. If the acidified substance contains a maximum of oxygen, the name of the salt terminates in *ate;* if a minimum, the termination in *ite* is employed. Thus, the sulph*ate*, phosph*ate*, and arseni*ate* of potassa, are salts of sulphur*ic*, phosphor*ic*, and arsen*ic* acids; while the terms sulph*ite*, phosph*ite*, and arsen*ite* of potassa, denote combinations of that alkali with the sulphur*ous*, phosphor*ous*, and arseni*ous* acids.

"The different salts formed of the same constituents were formerly divided into *neutral*, *super*, and *sub*-salts. They were called neutral if the acid and alkali are in the proportion for neutralizing one another; super-salts if the acid prevails; and sub-salts, if the alkali is in excess. The name is now regulated by the atomic constitution of the salt. If it be a compound of one equivalent of the acid to one equivalent of the alkali, the generic name of the salt is employed without any other addition; but if two or more equivalents of the acid be attached to one of the base, or two or more equivalents of the base to one of the acid, a numeral is prefixed so as to indicate its composition. The two salts of sulphuric acid and potassa are called sulphate and *bi*-sulphate; the first containing one equivalent of the acid to one equivalent of the alkali, and the second salt, two of the former to one of the latter. The three salts of oxalic acid and potassa are termed the oxalate, *bin*oxalate, and *quadrox*alate of potassa: because one equivalent of the alkali is united with one equivalent of acid in the first, with two in the second, and with four in the third salt. As the numerals which denote the equivalents of the acids in a super-salt are derived from the Latin language, Dr. Thomson proposes to employ the Greek numerals, *dis*, *tis*, *tetrakis*, to signify the equivalents of alkali in a sub-salt.

Growth of Washington.—During the past year there were erected in the city of Washington, 357 buildings, 18 shops, and 24 additions; and 15,080 feet of pavement was laid. The population is estimated at 30,426. The assessment in 1844, estimated the value of buildings at $5,588,758, and of personal property at $1,209,500. The average number of buildings erected from 1840 to 1845, was 273, while from 1830 to 1840, the average number was only 89, showing a steady and gratifying increase within the last few years.

INDIANA FARMER & GARDENER.

Indianapolis, February 8, 1845.

Winter Nights for Reading.

As the winter is a season of comparative leisure, it is the time for farmers to *study*. It is a good time for them to make themselves acquainted with the *nature* of soils, of manures, of vegetable organization—or structural botany. Farmers are liable to rely *wholly* upon their own experience, and to despise science. Book-men are apt to rely on scientific theories, and nothing upon practice. If these two tendencies would only court and marry each other, what a hopeful family would they rear! How nice it would look to see in the papers.

MARRIED — By Philosophical Wisdom, Esq., Mr. Practical Experience, to Miss Sober Science. [We will stand Godfather to all the children.]

It was on the supposition that our subscribers, in these long evenings, could read long articles that we have ventured so much on their patience in the article on Cultivating Fruit.

Seedlings from Budded Peaches.

In the October No. of the Western Farmer and Gardener, (*not* the *Indiana* F. & G.) Mr. Longworth inquires:

"Will the pit of the budded peach produce the same fruit as the bud, or as the stock, or a mixture of the two?" and he also says, "I have never fairly tested the question, but my experience led me to believe that the budded pit produced the same fruit as the original stock."

So far as this question can be determined (independently of experiment) upon the known laws of the vegetable kingdom, we say that it will *not* produce fruit like that of the original stock; nor will it, on the other hand, with any certainty, re-produce the budded kind.

If the pit of a budded variety takes after the *stock*, we must very much change our theory of the office of leaves, and perhaps of the bark. At present, the received and orthodox teaching is, that the sap from the root is crude and undigested until it has received in the leaf a chemical change. Until then, the sap does not materially influence the vegetable tissue, nor form new substance, or affect the fruit. But *after* its elaboration in the leaf, a returning current of prepared sap, (similar in its functions to arterial blood,) sets downwards, distributing to every part of the vegetable economy the properties required by each. The sap arising from the root, does not touch the channel of fruit until it has been chemically changed; and the difference exhibited in the fruit of one tree compared with another, arises, primarily, from the nature of the sap which it receives; the sap receives its qualities by a digestion in the leaf.* In all cases, then, we suppose the *leaf* to determine the nature of the fruit, (and the root in no case, and the trunk in no case,) since the stem is, so far as sap is concerned, but a bundle of canals for its passage—a mere highway for transmission—and not like the leaf a laboratory for its preparation.†

We may be reminded that a *stock*, in point of fact, *does* influence the fruit. It is indisputable that pears are changed on quince roots. The *Wilkinson*, grafted upon the quince, is smaller, more prolific, higher flavored, and of a brighter red cheek than if grafted on the pear. The Duchesse d' Angoulême is larger and better on the quince than on its own roots. But what is *the* influence in this case? When a free-grower is put upon a slow-grower, the point of junction becomes a point of comparative *obstruction* to the return-sap. It is only

*The fruit itself still further elaborates the sap, else a peach would be as acrid as the juice of the peach leaf.

†Loudon (Encyc. of Gardening p. 448,) has the following remarks:

"The bark is the medium in which the proper juices of the plant, in their descent from the leaves, are finally elaborated and brought to the state which is peculiar to the species. From the bark these juices are communicated to the medullary rays, to be by them deposited in the tissue of the wood. The character of timber, therefore, depends chiefly upon the influence of the bark; and hence it is that the wood formed above a graft never partakes, in the slightest degree, of the nature of the wood below it. The bark, when young and green, like the leaves, is supposed, like them, to elaborate the sap, and hence may be considered as the universal leaf of a plant."

These views corroborate the reasoning above, although Loudon extends the functions of the leaf to the *bark*. We have not been able, in our limited range of books, to find any other authority for this statement, respecting the "young and green bark."

a wholesale process of *ringing*, or *decortication*. Lindley says:

"When pears are worked upon the wild species, apples upon crabs, and peaches upon peaches, the scion is, in regard to fertility, exactly in the same state as if it had not been grafted at all; while, on the other hand, a great increase of fertility is the result of grafting pears upon quinces, peaches upon plums, apples upon the thorn, and the like. In these cases, the food absorbed from the earth by the root of the stock is communicated slowly." And Manning adds: "No other influence have we ever noticed exercised by the scion upon the stock."

But if, after all, it can be shown by actual trial, that the pits of budded peaches DO *go back to the fruit of the stock*, why we must receive it, in spite of all theory; for, (and some would do well to heed the maxim,) facts must rule our theories, and not theories our facts. But we may properly put any facts seeming to contravene the received theory of the functions of plants in producing fruit, *upon their oath*, and refuse them, unless they are unquestionable and relevant.

Suppose a budded peach not to yield a fruit at all like the bud, suppose it to resemble the fruit of the stock, it does not follow that the *stock* influenced the fruit to such a change. Mr. Longworth knows how freely some peaches 'sport,' and that all peaches may be made to do it. If a Melacatune be budded upon a Red Rare ripe, and the Melacatune pit shows a fruit resembling the Red Rare ripe, it must be shown that the blossom had not been crossed by the busy offices of flies, bees, &c., with the pollen of contiguous Red Rare ripe trees.

When a tree is even *solitary*, it does not follow that a change in fruit which shall make it resemble the stock more than the graft, results from the force *of the stock* on the grafted fruit, for seedlings of grafted fruit are, notoriously often, base and degenerate; and the resemblance might be accidental, for seedlings of different origin are often strikingly alike.

While we are aware of no facts which justify Mr. Longworth's suspicion, that the pits of budded varieties produce kinds like the stock on which the bud was put, we have facts enough showing that 'budded pits' produce their own kind.

The Lemon-cling is sufficiently marked in its character to afford a good test. Mr. Gedney, of Dearborn Co., Ia., brought from Flushing, L. I., the pits of the budded Lemon-cling, which he had there cultivated for the New York Market. The pits were planted, and re-produced the identical Lemon-cling. From *these* trees Mr. Van Houten, of this place, procured pits, and planted them in this (Marion) county. *They* also produced the genuine Lemon-cling. *We* had procured of Mr. Ernst's Nursery, (Cincinnati,) the budded Lemon-cling. When the fruit of *our* trees were put on the table near the seedlings of Mr. Van Houten, in shape, color, and flavour, they were indistinguishable. The habits of the trees were alike. In this case, the identity was preserved through two generations.

It may be added that *thoroughly* ripe peaches are less inclined to 'sport' than those which are partially green.

Geological Definitions.

Many terms, in general use among scientific men, and usually employed in Agricultural works, are obscure to young readers. For their sakes we will explain some of them; and shall not be angry if *old* men profit by the explanation.

Soil. The surface earth, of whatever ingredients it may be composed. It may be a clay-soil, a sand-soil, a calcarious soil, as the surface is composed of clay, or sand, or clay strongly mixed with lime, &c.

Subsoil. The earth lying below the ordinary depth to which the plow or spade penetrate. Sometimes it has hardened by the running of the plow over it for a series of years; then it is called *pan*, as hard-pan, clay-pan, &c. It is sometimes of the same nature as the top-soil, as in clay-lands; in others it is a different earth; as when a coarse gravel under-lays vegetable mould, or when clay lies beneath sandy soil.

Subsoil Plowing. In ordinary plowing, the share runs from five to seven inches deep. A plow has been constructed, (called subsoil plow,) to follow in the furrow, and break up from six to eight inches deeper—so that the whole plowing penetrates from ten to sixteen inches.

Subsoil Plow. A plow having a narrow "*double share*, or a small share on each side of the coulter, and no mould-board." It is

designed to break up and soften the subsoil, but not to bring it up to the top.

Mould. A soil in which decayed vegetable matter largely predominates over *earths.* Thus, leaf-mould is soil *principally* composed of rotten leaves; dung-mould, of dung reduced to a fine powdery matter; heath-mould, a black vegetable soil found in heath-lands; peat-mould, forest-mould, garden-mould, &c.

Loam. Clay, or any of the primitive earths, reduced to a mellow, friable state by intermixture of *sand*, or vegetable matter, is called loam. Clay lands well manured with sand, dung, or muck, is turned, gradually, to a loam.

Argillacious. From the Latin (*argillaceus,*) soil principally composed of clay.

Alumina or *alumine.* Generally employed to signify *pure* clay. It is, chemically speaking, a metallic oxide: *aluminium* is the metallic *base*, and is an elementary substance.

It is generally known that the *diamond* is pure carbon, (charcoal is carbon in an impure state,) but it is not as generally known that the *Ruby* and the *Sapphire*, "two of the most beautiful gems with which we are acquainted, are composed almost solely of alumina," or pure clay in a chrystalized state.

Silicious. An earth composed largely of Silex. *Silex* or *Silica* is considered to be a primitive earth constituting flint, and contained most kinds of sands, sand-stones, &c. China or porcelain ware is formed from silica and alumina united, *i. e.* from silicious sand and clay.

Calcarious. A soil into the composition of which lime enters largely. Lime-stone lands are calcarious. Pure clay manured freely with marl becomes calcarious, for marl is, mostly, clay and carbonate of lime.

Alluvial. Strictly speaking, alluvium or our alluvial soil, is a soil formed by causes yet in existence. Thus a bottom-land is formed by the wash of a river. It is usually a mixture of decayed vegetable matter and sand.

Diluvial. A diluvial soil or deposite is one formed by causes no longer in existence. Thus a deposite by a deluge is termed *diluvial.* The word is derived from the Latin (*diluvium,*) signifying a deluge.

The terms argillacious, calcarious, silicious, alluvial and diluvial are constantly employed in all works which treat of husbandry.

Friable. A friable soil is one which crumbles easily. Clay is *adhesive*, or in common language *clammy*: leaf-mould is friable, or crumbling. Clay becomes friable when, by exposure to air or frost, or by addition of sand, vegetable matter, &c., it is thoroughly mellowed.

Draining Wet Lands.

We do not suppose that the time has come in Indiana for the general introduction of a system of *Draining*, although there is not, perhaps, another State where so much first rate land might be redeemed by it. Before many years there will be thousands of acres pierced with drains. But the inducements to it which make it wise in England and New England do not yet, generally, exist in Indiana. The expense of draining one acre would buy two. Many farmers have already more arable land than they can till to advantage. Land redeemed from a slough would not pay for itself in many years.

But although a general introduction of Draining would not be wise, there are many cases in which, to a limited extent, it should be practiced. Lands lying near to cities are sufficiently valuable, and the market for farming products sure enough, to justify the reclaiming of wet pieces of land. On small farms of 40 and 80 acres, surrounded by high priced lands, not easily procured for enlarging his farm if the owner should wish it, draining might be employed with advantage. A man with a *small* farm can *afford* expenses for high cultivation which would break a *large* farmer.

Some times a large meadow or arable field is marred by a wet slash through the middle of it; a farmer would not begrudge the labor of draining for the sake of having his favorite field without a blemish. Sometimes farms are intersected by wet lands, which make the passage from one part of the farm to another difficult at all times, and almost impassible at some seasons of the

year. Draining might be resorted to in such a case, not so much for the sake of the land reclaimed, as for the convenience of the whole farm.

We know pieces of wet, peaty, meadow land lying close by the farm house, the only drawback to the beauty of the place. A good farmer would wish to recover such a spot for the same reason that he would prefer a handsome house to a homely one — a fine horse over a coarse looking animal — a sightly fence, rather than a clumsy one. — There is much strong land, — but high, flat, and cold, — which is wet through all the spring, resisting seed till long after other portions of the farm are at work, and which would, but for this backwardness, be regarded as the best land. If without great expense such land could be cured, few farmers would mind the trouble or labor.

There are three kinds of Draining which may be employed according to circumstances—subsoil-plowing—furrow-draining—and ditch-draining. When a soil is underbound by a compact, impervious *subsoil*, all the rain or melting snow is retained in the soil until it can *exhale* and evaporate. For the subsoil acts like a water-tight floor, or the bottom of a tub. Subsoil-plowing, by thoroughly working through this under crust, gives a downward passage to the moisture; water sinks as it does in sandy loams. Nor will such treatment be less useful to prevent the injury of summer drought; for the depth of soil affords a harbor for roots from whence they can draw moisture when the top-soil is dry as ashes.

But there is a limit put to this treatment by the amount of clay contained in the subsoil. It has been experimentally ascertained in England, that when the soil contains as high as 43 per cent. of alumina (clay) subsoil-plowing is useless, because the clay soon *coalesces* and is as impervious as ever. In such cases if the land has a slight inclination in any direction furrow-draining may, in some measure, relieve it. The ground is marked out in lands as for sowing grain and plowed with back-furrows, throwing the earth toward the centre. The rain and snow will run to either side, and flow off by the channels left between each strip. This treatment does not relieve the land, to any great extent, of water contained in it, but acts as a preventive, by carrying off the rain and snow before they are absorbed.

We shall give some account of under-draining in our next paper, and close this article by an extract from a correspondent of the Albany Cultivator, on the subject of surface-draining clay soils.

"Our system must essentially combine economy with utility, and this can be effected to a very great extent in *surface drains*. These should exist wherever water remains on the ground after rains, or when it is too much saturated with springs in the vicinity. No stagnant water should ever be allowed in a civilized country; for, besides its effectual hostility to all useful vegetation, it poisons the atmosphere and becomes the prolific source of half our diseases and deaths. If a systematic course be pursued in all the operations of the farm, much draining may be effected with scarcely any additional trouble and expense. For instance, all clay and flat lands should be plowed into narrow ridges, and every successive plowing should be directed to make the more elevated portions higher, and the depressed one still lower, always preserving an outlet, that the water accumulated in the last should be carried off freely, and by this means the whole surface becomes a succession of surface drains without the expenditure of a day's labor to an acre. In many instances, however, main ditches will require to be cut for a considerable distance, to get sufficient depth and slope to carry off the water rapidly; and when the principal drain is made, the tributaries can be completed at a trifling expense, either with the plow and hoe or the spade. To illustrate my meaning, I will describe the manner of draining a piece of land I recently adopted. The lot consists of a stiff clay, running back from the Niagara river, with a gradual ascent of not more than five or six feet, for a mile. It is traversed through the whole distance with irregular undulations, but the ridges almost universally running parallel with the river. At right angles with the river, and across these, I run a ditch four feet wide at the top, two feet at the bottom, and from one to three and a half feet deep, so as to preserve a uniform descent on the bottom, thus cutting transversely all these longitudinal ponds; for they were nothing else in ordinary wet seasons, and a little additional work with the spade or plow, effectually carries off all the surface water. The whole expense of this does not exceed one dollar per acre."

Flowers, Ladies, and Angels.

If Ladies wish to get into the very best company possible, we do not know of any pleasanter way than is detailed in this beautiful scrap from a German poet:

A flower do but place near thy window glass,
And through it no image of evil shall pass.
Abroad must thou go? on thy white bosom wear
A nosegay, and doubt not an angel is there;
Forget not to water at break of the day
The lilies, and thou shalt be fairer than they;
Place a rose near thy bed nightly sentry to keep,
And angels shall rock thee on roses to sleep.

And pray what will happen if a *gentleman* does all this? For one, we have a personal curiosity to know; for we do all these things and a good many more. If any other angels have hovered about us than angelic flowers (always, friend Bateman, excepting our four domestic angels) we make an especial request to them not, hereafter, to be so shy about it. Our natural eye would delight to behold in veritable substance all the flower-spirits which our ideality spies lurking in our garden-blossoms.

O dear! Shall we ever be done Lying?

An honest old gentleman, in telling us his troubles, gave great prominence to the necessity he was frequently under of disappointing his customers, whose work could not be finished as soon as he had promised. After explaining the difficulty, he looked up with great earnestness, and exclaimed, "*O dear! shall we ever be done with this lying?*"

We have often wondered ourselves whether such a consummation would ever take place. "Your boots shall be done on Saturday night without fail." Nevertheless, you have to go to church with gaping shoes, for want of them. "Your coat shall be sent home by nine o'clock Saturday night;" and you get it, in fact, the Wednesday after. "Will you lend me your wheel-barrow? I will return it to-night." You wait for it till next week, and then *send* for it. My carpenter solemnly agreed to finish my house by November; but it was July before I could get the key. My wood was to be split on Saturday afternoon—enough for the Sabbath; so it was—but I had to do it. My money was to be paid me the next week; and then, *next* week; and then, NEXT week—and *then*, as soon as he could get it; he did get it and spent it: and then it should be paid when he got it again—he got it again; and paid another debt because the man treated him more savagely than I would. The strength laid out in running for this money, if it had been economically applied to labor, would, nearly, have *earned* the whole debt. The fellow never paid me at last; but Death came along, and he paid him promptly. "Oh! dear, shall we ever get done with this lying?" It is one of the few domestic manufactures which need no protection, and flourishes without benefit either to the producer or consumer.

Cultivation of Fruit Trees.

An elaborate article upon the Fire Blight, read before the Indiana Horticultural Society, was ordered by them to be sent to, and was published in the Western Cultivator, Western Farmer and Gardener, and Hovey's Magazine (Boston.) Cultivators in this region, which has so severely suffered from Blight, naturally feel interested to know the opinions of distinguished pomologists at the East upon the subject. The following extract is from Hovey's Magazine for January, 1845.

"The closing number of our last volume contained an excellent article by the Rev. Mr. Beecher, on the blight of the pear tree, which, we believe, has been read with unusual interest. Mr. Beecher has searched every publication for information on the subject, and his opinion is entitled to much weight. It is certainly evident that the blight of the *West* is not the blight of the New England States. It has been satisfactorily shown by Mr. Lowell and Dr. Harris that the blight, so termed, in this vicinity, is caused by the attacks of the Scolytus pyri. As described by Mr. Beecher, the blight of the West is a malignant disease which is destroying a great many of the fruit orchards in that section of the country, and unless some remedy is discovered, will prevent the extensive cultivation of the pear. The Cincinnati Horticultural Society could not do a better service in the West, than the offer of a liberal premium for the discovery of a preventive of the blight."

It is due to Mr. Reagan of Putnam county, to say, that *he* is the father of this theory. It was from him that I received the first real light as to the *cause* of Fire-Blight. I was entirely satisfied that it was not an insect affection, nor induced by any of the popularly

ascribed causes; and that it *was* a disease of the *circulation;* so that I was entirely prepared to receive, instantly, Mr. Reagan's theory, that it was caused by sudden freezing in the autumn while the tree was in a growing and an excitable state. The offering of a premium for a remedy implies that a remedy may exist in some form of medicinal treatment, if such terms may be applied to vegetables. I do not believe that there is any *specific* for its cure.

We must give up thinking of *remedies* and seek after *preventives.* Amputation may limit its ravages after the disease is developed; but surgery is not a remedy, but a resource after remedies fail. We must, it seems to me, look for a preventive in a wiser system of fruit cultivation. To this subject we shall now speak.

The effect of cultivation in changing the habits of plants is familiar to all. Incident to this artificial condition of the plant, there will be new diseases, vegetable vices, which, as they result from cultivation, must be regarded in every perfect system of cultivation.

Where trees are grown for timber, or shade, or ornament, everything can be sacrificed to the production of wood and foliage. But in fruit trees wood is nothing and fruit is everything. We push for *quantity* and *quality* of fruit; and would not regard the wood or foliage at all, if it were not indispensable as a means of procuring fruit. That is the most skillful treatment of fruit trees which involves a just compromise between the wants of the *tree,* and the abundance and excellence of *fruit.* There is a way of gaining fruit by a rapid consumption of the tree; and there is a method of gaining fruit by invigorating and prolonging the tree. Two systems of cultivation grow out of these different methods—a natural system and an artificial system. All *cultivation* is artificial, even the rudest. By natural system, then, is only meant a treatment which interferes but *little* with nature; and by artificial, a system in which skill is applied to every part of the vegetable economy. For conservatories, gardens, and experimental grounds, there is no reason why an artificial system should not exist. Moral considerations restrain us from stimulating a man or a beast to procure a quick or a large return at the expense of life and limb; but in vegetable matters our *preference* or interest is the only restraint. If any reason exists for forcing a tree to bear young, and enormously, and after ten year's service for throwing it away, it is proper to do it. For larger show-fruit we *ring* a limb expecting to sacrifice the branch; we diminish the life of the pear by putting it to a dwarf habit by violent means. If we have any sufficiently desirable object to accomplish, there is no reason why we should not do it. There may be as good reasons for limiting a tree to ten years as a strawberry bed to three.

There is another form of the artificial system in which there *is* much to censure. When fruit trees are set in gardens, yards, &c., to be permanent, and *long-lived,* it is folly to apply to them that high-toned treatment which belongs to an artificial system as I have spoken of it above. Impatient of delay, the cultivator presses his trees forward by stimulating applications, or retards them by violent interference; — by prunings at the root or branch, by bending or binding; everything is sacrificed for early and abundant bearing. Fine fruit yards, designed to last a hundred years, are served with a treatment proper only to a conservatory or experimental garden. This high-toned system is still more vicious when applied to orchards and especially to pear orchards; and it seems to us that much is to be learned and much unlearned before we shall have attained a true science of pear culture. Let us consider some facts. It is well known that seedling apple trees are generally longer lived than grafted varieties, and obnoxious to fewer diseases. The same is true of the pear tree. It has frequently been said that *seedling* and *wilding* pears were not subject to the blight. This is not true if such trees are undergoing the same cultivation as grafted sorts; it is not always true when they exist in an untutored state; but when they are left to themselves, they certainly are *less* obnoxious to the blight and to disease of any kind, than are grafted and cultivated varieties. A comparison between wild and tame, between cultivated and na-

tural, between seedling and grafted fruit, is certainly to the advantage of seedling and uncultivated fruit, *in respect to the* HEALTH *of the tree*—of course it is not in respect to quality of fruit. In connection with these facts, consider another, that seedling and wilding fruit is nearly twice as long in coming into bearing as are cultivated varieties. The seedling apple bears at from ten to fourteen years. The pear bears at from fifteen to eighteen years. But upon cultivation the grafted pear and apple bear in from five to eight years. It is noticeable that although the pear as a wilding is four or five years longer in coming to a bearing state than the apple, yet, upon cultivation, they both bear at about the same age from the bud or graft. In a private letter from Robert Manning, (I prize it as among the last he ever wrote; another, received not long after, was *dictated;* but signed by his tremulous hand in letters which speak of death,) he says "*Pears bear as soon as apples of the same age*; on the quince much sooner, &c."

It appears then, that while cultivation accelerates the period of fruit bearing and perfects the fruit, it is also accompanied with premature age and liability to diseases. I do not wish to be understood as opposing the habit of *cultivating* fruit, or as prejudiced against grafted varieties—I am neither opposed to the one nor to the other. But I would deduce from facts, some conclusions which will enable us to perfect our fruits by a more discriminating treatment.

The question will arise, is it only by accident that liability to disease increases, with increase of cultivation? Is there an *inherent* objection in *all* artificial treatment? or is there objection only to particular methods of artificial cultivation?

Although there may be too many exceptions, to allow of our saying, that quickly-growing timber is not durable, it may be said in respect to trees of the same species that, the durability of the timber depends (among other things) on the slowness of its growth. Mountain timber is usually tougher and more lasting than champaign wood; timber growing in the great alluvial valleys of the West, is notoriously more perishable than that grown in the parsimonious soils of the North and East.

The reason does not seem obscure. In a rich soil, and under an ardent sun, not only is the growth of trees greater in any given season, than in a poor soil, but the growth is coarser and the grain coarser. But what is a *coarse* growth, and what is fine-grained, or coarse-grained timber?—timber in which the vascular system has been greatly distended, in which sap-vessels and air cells are large and coarse. Where wood is formed with great rapidity and with a superabundance of sap, not only will there be large ducts and vessels, but the sap itself will be but imperfectly elaborated by the leaves. We may suppose that overfeeding in vegetables, is, in its effects, analogous to overfeeding in animals. The sap is but imperfectly decomposed in the leaf—it passes into the channels for elaborated sap in a partially undigested state—it deposites imperfect secretions, and the whole tissue resulting from it, will partake of the defects of the *proper juice*.*

Thus a too rapid growth not only enlarges the sap passages, but forms their sides and the whole vegetable tissue of imperfect matter. This accounts, not only for the perishableness of quickly-grown timber, but, doubtless, for the short-lived tendency of cultivated fruit in comparison with *wildings*. For where the tissue is imperfectly formed, general weakness must ensue.

These reasonings do not include plants which, in their original nature, have a system of large sap-vessels, &c., and which naturally are rapid growers, but respects only plants which have been forced to this condition by circumstances.

Has this condition of the vegetable substance nothing to do with the health of a tree? Does it not very much determine its liability to disease?—its excitability? Where are trees liable to diseases of the circulation? In England, in New England, where, by climate and soil, growth is slow?—or in

*For the young reader it may be necessary to say, that when sap is first taken up by the roots it is called *true sap;* but after it has undergone a change in the leaves it is called *proper juice*.

the Western and Middle States where, by climate, by soil, and by vicious treatment the growth is excessive! This leads me to review the methods employed in rearing fruit trees.

The nursery business is a commercial business, and aims at *profit*. It is the interest of nurserymen to sell largely, and to bring their trees into market in the shortest possible time from the planting of the seed and the setting of the bud, to the sale of the tree. But independently of this, few nurserymen know, accurately, the nature of the plants which they cultivate, and still less the habits of each variety. Why should they when learned pomologists are content to know as little as they! The trees are highly cultivated and closely side-pruned. The *vigor* of a tree, i. e. the rapidity with which it will grow, determines its favor. Sorts which take time, and require a longer treatment, are regarded with disfavor. Everything is sacrificed to rapid growth and early maturity.

Next, and proceeding in the same evil direction, comes the orchard cultivation.—From what quarter have we, mostly, derived our opinions and practices in fruit cultivation? From French, English, and N. England writers. But is the system which they pursue, fit for us? There is an opposite extreme to high cultivation; there are evils besetting low-cultivation. In cold, wet, stiff, barren soils, and in a cool, or humid, or cloudy atmosphere, trees require stimulants. The soil needs drying, warming, manuring; and the tree requires pruning. But such a system is ruinous, where the soil is full of fiery activity, bursting out with an irrepressible fertility and a superabundant vegetation; where the long summer days are intensely brilliant, and the *air* warm enough to ripen fruit even in the densest shade of an unpruned tree.

A traveller in Lapland would require the most bracing and stimulating food; but in New Orleans it would produce fever and death. A region, subject to all the diseases and evils of vegetable plethora, has adopted the practice of regions subject to the opposite evils. While receiving with gratitude, at the hands of eminent foreign Physiologists and Cultivators, the *principles*, we must establish the ART of Horticulture, by a practice conformidable to our own circumstances. A treatment, which in England would only produce healthful growth, in Indiana would pamper a tree to a luxurious fulness. Let us not be deluded by the fallacious appearances of our orchards. The evils which we have to fear are not shown forth in the early history of a tree or an orchard. On the contrary, the appearances will be flattering. The apple is a more hardy tree than the pear, and will endure greater mismanagement; but in the long run we shall have to pay for our greedy cultivation, even in the apple family. Our pear trees are already evincing the evils of a too luxuriant habit; and if the West is ever to become the pear-region of America, the culture of this tree must be adapted to the peculiarities of Western soil and climate.

In the next number, we design to resume this subject, by suggesting a proper course of treatment.

Tired of Law.

Let our farmers' boys who are discontented with the plow, and who think their genius fits them for 'the Law,' read the following:

"*No Fiction.*—The subscriber having come to the conclusion to abandon the practice of law, offers for sale his Law Library, containing 200 volumes of Law Books, which are afforded at the reduced price of one half of their original cost.

Any person wishing to embark in the practice of law, devote his whole time and sleepless nights for the welfare of his clients —pay the disbursements out of his own pocket to some pampered officer—trust his client six years, giving him a chance to abscond, take the 'benefit of the act,' or shield himself with the exemption law, and receive nothing himself but curses from the ungrateful portion of the community, will do well to embrace the present opportunity offered of purchasing a library.

ROSWELL JUDSON.

Sherburne, Dec. 24, 1844."

The Oxford Times (N. Y.) says that "Roswell Judson" is the First Judge and Surrogate of Chenango Co., N. Y. We have a dozen or so within our own knowledge, whose experience has resembled that of Judge Judson; but who have not yet shown his common sense.

Care of Stock in Winter.

Perhaps no better sign of careful husbandry can be found than in the attention paid to brute animals. We always expect a thriftless fellow to neglect and to abuse his stock. When we see them well cared for, we always judge the owner to be a good farmer. The present winter is not a trying one to stock on account of cold, or cold rains—the worst of all forms of cold. Cattle ranging out have had good picking thus far, and if partly fed at the rack, will come out in the spring well-conditioned. Where hay and grain are a drug, we suppose that all cautions about wasting them will be laughed at. *Care* and *economy* are not the peculiar features of Western farming; profusion and easiness are the more characteristic. But there are some points of attention to which every farmer should give heed.

Cleaning the Stable. When cattle lie out, this trouble is saved in their case. But it is almost universally the practice to let the manure accumulate in stables for horses from autumn to spring, and sometimes from year to year, until its quantity compels its removal. This is all well enough for the sake of the manure—it is sheltered, and its strength preserved. But it is at the expense of the horse. The concentrated effluvia is bad; and lying down upon manure night after night causes the skin to break out in blotches; and sometimes the whole ham is affected so much that the hair comes off, and the skin is inflamed and covered with running sores. The ammonia of urine (which abounds in horse manure,) is caustic, and acts upon the skin like a blister upon the human flesh. If Providence had ordained that a sore should break out on the owner, for every one on his stock occasioned by his negligence, animals would have a much better time than they now do.

Cows with Calf. Especial attention should be paid to these. As they grow heavy, toward spring, they should not be chased by horses or dogs, or beaten by unmannerly boys and men. Their food should be abundant and nutricious. A cow brought to calving in spring in a very thin and lean condition will not recover through the whole summer, no matter how carefully tended. The cow, the calf, and your own profit in both, require that you should bring your cows to the spring in first rate condition. If you have *roots*, feed them; but if not, give a slop of shorts, meal, and flax-seed cake. This last ingredient is eminently serviceable in laying on flesh.

Milking Cows. Let them be milked regularly without regard to weather. A careless girl will, if not watched, milk irregularly, and what is worse, leave the cow *unstript*. The morning work presses, or the cold pinches, or she is in haste, at night, to go a visiting, or some one of a hundred other reasons tempt her to milk out the full flow—and leave the strippings. A cow so abused will be injured, in a short time, so much, that all the care in the world will not bring her back again.

See that stock are treated with gentleness and patience. It is a shame to abuse a kind and docile animal, and it is useless to thrash those that are not so. In either case, kindness is the best policy. A man who is brutal to cattle is more of a beast than they are. We have seen many a man who, if he had two more legs, would not fetch the price of a stock-hog.

Hawkins, the Washingtonian.

JOHN HAWKINS was one of the original, Baltimore band of Washingtonians. We had often heard *of* him; but during the past week he has been in Indianapolis, and labored with distinguished success in his philanthropic vocation. If it is remembered that the temperance reformation had already done a good work in this community, that hundreds both of the temperate and of the intemperate were enrolled members, an accession of 300 members, in three days, must be regarded as a remarkable triumph. The scene has been intensely interesting; and no feature of it more so, to our mind, than the unexpected generosity of some of the liquor sellers. In one case, a worthy mechanic who had become a bitter enemy to himself by means of intemperance, was induced to sign the pledge. He was, at the time of doing it, much staggered by liquor. But after putting his hand to this true Washingtonian Declaration of Independence, he

remarked, "I tell you this makes me feel sober." He shortly after left the church, and was followed, out of curiosity, by a friend. He went down the street to his old haunt, the liquor-shop, and went in; his friend stepped in and tapping him on the shoulder, said: "Friend, you forget what you've been doing; you ought not to be here." "Let me alone, I know what I'm about; I'm going to take a good-bye of my old comrades." Some eight or ten tipplers sat around the room, and he commenced shaking hands with them all around. Although they were themselves a good deal *seasoned* at the time, they warmly greeted the new made Washingtonian, and heartily congratulated him on the step he had taken.

But the best of all was the conduct of the owner of the shop. He expressed his gratification, and said: "If there was ten thousand dollars on this counter here, and the PLEDGE there, and you should ask me which you had better take, I would tell you to take the PLEDGE. And now you shall never break it in my shop. I never will give you a glass of liquor myself, and no other man shall, and no man shall treat you at this bar."

There was another incident of a similar nature. Another retailer said to a *hard case*, who had become a Washingtonian: "Ben, you know I have a score against you of thirty-five dollars; as long as you keep your pledge, you may consider that debt as paid; but if you ever go to drinking again, you must pay me the debt."

It is pleasant to find humanity in such quarters; and we feel as though men capable of such kindness, ought to be incapable of systematic unkindness by pursuing an immoral business.

Mr. Hawkins has gone to Lawrenceburgh, in this State—the very metropolis of whiskey. He said that he would be glad to get one of the Distilleries to lecture in; and, in that case, would take the following passage from the Bible as his text—"*Out of the belly of Hell cried I.*"

May his success be as signal there, as it has been in Indianapolis.

An ill book is the worst of thieves.

Deep Planting.

We saw last week, a potatoe which grew at the depth of *twenty-five feet* below the surface of the earth. This is an extraordinary depth. Few things planted at that depth would vegetate. The fact in this case is unquestionable. The top was terminated by a cluster of *blossoms*, and the potatoes were of the size of small hickory-nuts.

P. S. Another fact, which like to have been omitted in this account, is, that it grew at the bottom of an *open well*.

A Temperance Triumph.

Horace Greely, of the New York Tribune, speaking of Peacham, Vermont, says, that within his remembrance this one town contained *thirty distilleries* of whiskey. The Temperance reformation, however, visited the place:

"The distilleries were all long since abandoned, and we believe no ardent spirit of any consequence has been sold in the town for a number of years. Recently the question of licensing the traffic was submitted to the people of the several counties, and each citizen who chose to do so, was allowed to record his vote. The vote in Peacham stood 12 in favor and 173 against licensing. The Vermont Chronicle, alluding to these circumstances, pertinently asks, 'When a single town can free itself from such an incubus as thirty-two distilleries, who will despair of the Commonwealth?' The Temperance reform has indeed accomplished wonders all over the land, but we doubt whether it has ever achieved a more brilliant or substantial triumph than in this obscure town which nestles securely and peacefully amid the Green Mountains of Vermont."

This will do for an old State, but it is nothing at all at the West. If Mr. Greely would only come to Lawrenceburgh in this State, we could shew him a triumph of Temperance which would make the Green Mountain boys look greener yet. This town had a Distillery which, with its utmost exertions, could not manufacture more than *seventy-five barrels* of whiskey a day. Such deplorable destitution would never do in this christian country. Accordingly, a new Distillery has just been completed which manufactures *fifty barrels* a day more. But the *gist* of the case is, that this latest fiend-house was erected by a distinguished *tem-*

perance man, and a *Christian!* Now if Vermont has achieved any "more brilliant or substantial triumph" than this, we should like to hear of it.

Cruelty killed by Kindness.

A girl in Vermont married a poor but worthy man against her father's wish. He drove them from his house, and closed his door and heart against them. They came down near Boston, went to work, and prospered. After many years the father had occasion to come to Boston. He concluded to go and see his daughter, expecting a cold reception. His daughter and her husband received him most kindly and lovingly. After staying with them awhile, he went back to Vermont.

One of his neighbors, hearing where he had been, asked him how his daughter and her husband had treated him.

"I never was so treated before in my life," said the weeping and broken-hearted father. "They have broken my heart; they have killed me; I don't feel as though I could live under it."

"What did they do to you?" asked the neighbor. "Did they abuse you?"

"They *loved me to death*, they killed me with kindness," said he. "I can never forgive myself for treating so cruelly my own darling daughter, who loved me so affectionately. I feel as if I should die to think how I grieved the precious child when I spurned her from my door. Heaven bless them, and forgive me my cruelty and injustice to them."

Who does not see in this an infallible cure for difficulties between man and man?—There is not a child nor a man on earth, who would not feel and say that that daughter, though so deeply wronged and outraged by her angry father, did right in treating him as she did. That father was her enemy, but she was not his. He hated her, while she loved him.

["Kiss for a blow," by H. C. Wright.]

"William," said a carpenter to his apprentice, "I'm going away to-day, and want you to grind all the tools."

"Yes, sir."

The carpenter came home at night.—"William, have you ground all the tools right sharp?"

All but the *hand-saw*," said Bill; "I couldn't get quite all the gaps out of that."

TABLE OF PRICES CURRENT

At Cincinnati, Louisville, Lawrenceburgh, Madison, Indianapolis, Lafayette, Ft. Wayne, &c.

	Indianapolis.	Cincinnati.	Louisville.	Madison.	Lawrenceburgh.	Lafayette	Ft. Wayne.	Michigan City.
GRAIN.								
Corn, per bushel,	20a25 cts.	33a35	25a30			28a30	40 cts.	
Wheat per "	50 cts.	75 cts.	75 cts.			58a60	60a63	
Oats per "	18a20	23a25	20a25			20a22	30a33	
FLOUR, per bbl.	3.25	3.47a3,50	3,80a4,00			3,15a3,50	3,50	
CORN MEAL, p. bush.	25 cts.					31a31	50	
PORK, &c.								
Clear, per bbl.	none	10,00	9,00a10.00					
Mess,	none	9,00	9,00a9 25				9,00	
Prime,	none	7,00a7.25	7,00a7.50					
Hams, per lb.	5 cts.	5 cts.	5¼a5½			5a6		
Hog round,	2½ ct.	3⅜				2a3		
Lard,	5a6	5¼a6	prime 6			5a6	5a6	
CATTLE—								
On foot,		3,25a3,30	2,56a3,75					
Beef in barrels,								
FRUIT—								
Apples, dried,	37	75a80	75a87			50a1,00	1,00	
" green,	37	62a75	62a75			25a37	50,	
Peaches, dried,	1,12½	1,12½	1,00a1,12½			1,25a1,37	1,50	
SEEDS—								
Clover,	4 00	3,87a4,00	4,12a4,25			3,50a3,75		
Timothy,	1 00		1,87a2,25			88a1,00		
Hemp,		50 cts.	50 cts.			94a1,00		
Flax,	62 cts.	1,00a1,05	95a1.00			78a75		
SALT—								
Kenhawa,		1,32a1,95						
Onondaga,	3 50							
FEATHERS, per lb.	25 cts.	24a27	25			2.00a2,25	2,50	
TALLOW, per lb.	4a5	4a6	4a6			20a22	25	
HIDES,		4a9½				5a6		
BEESWAX,	25	25	25				7a8	
BUTTER,	12a18	15a25	12a20			22a24	25	
EGGS,	5a6	12a14				12a15	10a12½	
COFFEE,	8a10						8 cts.	
SUGAR,	8a10	4½a5				7a10		
						8a9		